

Claims:

1. A retinal prosthesis comprising:
An electrode array suitable to be mounted in close proximity to a retina;
- 5 An electronics package;
An electrical cable coupling said electrode array to said electronics package; and
A secondary inductive coil, electrically coupled to said electronics package and
suitable to be mounted to the side of a sclera.
2. The retinal prosthesis according to claim 1, further comprising a strap
connected to said secondary inductive coil and surrounding the sclera.
3. The retinal prosthesis according to claim 1, further comprising a strap
connected to said electronics package and surrounding the sclera.
4. The retinal prosthesis according to claim 1, further comprising suture tabs
connected to said secondary inductive coil suitable for attaching said secondary
inductive coil to a sclera.
5. The retinal prosthesis according to claim 1, further comprising suture tabs
connected to said electronics package suitable for attaching said electronics package
to a sclera.
6. The retinal prosthesis according to claim 2, further comprising a fan tail
connected to said secondary inductive coil and to said strap.
7. The retinal prosthesis according to claim 2, further comprising a hook on said
prosthesis suitable for engaging a surgical tool.

8. The retinal prosthesis according to claim 2, further comprising a sleeve for attaching ends of said strap together.
9. The retinal prosthesis according to claim 1, wherein said cable and electrode array comprise metal traces sandwiched between thin polymer films.
10. The retinal prosthesis according to claim 9, wherein said cable is folded to present the same side of said cable to both said electronics package and the retina.
11. The retinal prosthesis according to claim 1, wherein said electrical cable is suitable to pierce the sclera.
12. The retinal prosthesis according to claim 1, wherein said electrical cable is suitable to pierce pars plana region of the sclera.
13. The retinal prosthesis according to claim 1, wherein said electrode array is suitable to placed in an epiretinal location.
14. The retinal prosthesis according to claim 1, wherein said secondary inductive coil is a wound wire coil.
15. The retinal prosthesis according to claim 2, further comprising a fan tail connected to said electronics package to said cable to facilitate passing said cable through the sclera.
16. The retinal prosthesis according to claim 1, wherein said secondary inductive coil is substantially oval shaped.
17. The retinal prosthesis according to 1, further comprising:

A first passive coil suitable be mounted within the body on the side of a skull; and
A second passive coil electrically coupled to said first passive coil and suitable to be
mounted within the body proximate to said secondary inductive coil.

- 5 18. A retinal prosthesis comprising
a video capture device;
a source of power;
a primary inductive coil suitable to be placed outside of the body and electrically
coupled to at least one of said video capture device and said source of power;
- 10 An electrode array suitable to be mounted in close proximity to a retina;
An electronics package;
An electrical cable coupling said electrode array to said electronics package; and
A secondary inductive coil, electrically coupled to said electronics package and
suitable to be mounted to the side of a sclera and in close proximity to said primary
inductive coil.
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19. The retinal prosthesis according to claim 18, further comprising a strap
connected to said secondary inductive coil and surrounding the sclera.
20. The retinal prosthesis according to claim 18, further comprising a strap
connected to said electronics package and surrounding the sclera.
21. The retinal prosthesis according to claim 18, further comprising suture tabs
connected to said secondary inductive coil suitable for attaching said secondary
inductive coil to a sclera.
22. The retinal prosthesis according to claim 19, further comprising suture tabs
connected to said electronics package suitable for attaching said electronics package
to a sclera.

23. The retinal prosthesis according to claim 19, further comprising a fan tail connected to said secondary inductive coil and to said strap suitable to facilitate to passing said strap and said secondary inductive coil through muscle tissue.
24. The retinal prosthesis according to claim 19, further comprising a hook on said prosthesis suitable for engaging a surgical tool.
25. The retinal prosthesis according to claim 19, further comprising a sleeve for attaching ends of said strap together.
26. The retinal prosthesis according to claim 19, wherein said cable and electrode array comprise metal traces sandwiched between thin polymer films.
27. The retinal prosthesis according to claim 26, wherein said cable is folded to present the same side of said cable to both said electronics package and the retina.
28. The retinal prosthesis according to claim 18, wherein said primary coil is substantially oval shaped.
29. The retinal prosthesis according to claim 18, wherein said electrical cable is suitable to pierce the sclera.
30. The retinal prosthesis according to claim 18, wherein said electrical cable is suitable to pierce pars plana region of the sclera.
31. The retinal prosthesis according to claim 18, wherein said electrode array is suitable to placed in an epiretinal location.

32. The retinal prosthesis according to claim 18, wherein said secondary inductive coil is a wound wire coil.

33. The retinal prosthesis according to claim 18, wherein said primary coil is integrated in the temple of a pair of glasses.

34. The retinal prosthesis according to 18, further comprising:
A first passive coil suitable be mounted within the body and proximate to said
5 primary inductive coil; and
A second passive coil electrically coupled to said first passive coil and suitable to be
mounted within the body proximate to said secondary inductive coil.

35. A retinal prosthesis comprising:
10 An electrode array suitable to be mounted in close proximity to a retina;
An electronics package;
An electrical cable coupling said electrode array to said electronics package; and
A secondary inductive coil, electrically coupled to said electronics package and
suitable to be mounted to the side of a skull.